```
OM nucleic - nucleic search, using sw model

                                    GenCore version 5.1.3
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Run on:                 November 27, 2002, 03:36:38 ; Search time 1259.04 Seconds
                                    (without alignments)
                                    7350.598 Million cell updates/sec
Title:          US-09-893-615-88
Perfect score:  318
Sequence:       1 CAAATTGTTCTCTCCCAGTC...........GGACCATGCTGGAAATAAGA 318
Scoring table:  IDENTITY_NUC
                Gapop 10.0 , Gapext 1.0
Searched:       2054640 seqs, 1455140287B residues
Total number of hits satisfying chosen parameters:  4109280

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :      GenEmbl:*
        1:  gb_ba:*
        2:  gb_htg:*
        3:  gb_in:*
        4:  gb_om:*
        5:  gb_ov:*
        6:  gb_pat:*
        7:  gb_ph:*
        8:  gb_pl:*
        9:  gb_pr:*
       10:  gb_ro:*
       11:  gb_sts:*
       12:  gb_sy:*
       13:  gb_un:*
       14:  gb_vi:*
       15:  em_ba:*
       16:  em_fun:*
       17:  em_hum:*
       18:  em_in:*
       19:  em_mu:*
       20:  em_om:*
       21:  em_or:*
       22:  em_ov:*
       23:  em_pat:*
       24:  em_ph:*
       25:  em_pl:*
       26:  em_ro:*
       27:  em_sts:*
       28:  em_un:*
       29:  em_vi:*
       30:  em_htg_hum:*
       31:  em_htg_inv:*
       32:  em_htg_other:*
       33:  em_htg_mus:*
       34:  em_htg_pln:*
       35:  em_htg_rod:*
       36:  em_htg_mam:*
       37:  em_htg_vrt:*
       38:  em_sy:*
       39:  em_htgo_hum:*
       40:  em_htgo_mus:*
       41:  em_htgo_other:*
```

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	303.6	95.5	321	10	MMIG013	X58586 Mouse hybri
2	301.6	94.8	318	10	AF178620	AF178620 Mus muscu
3	301	94.7	318	10	AF178619	AF178619 Mus muscu
4	300.4	94.5	321	6	AR096128	AR096128 Sequence
5	300.4	94.5	321	6	AR210527	AR210527 Sequence
6	300.4	94.5	384	6	AR000010	AR000010 Sequence
7	300.4	94.5	384	6	AR060923	AR060923 Sequence
8	300.4	94.5	384	6	AR211055	AR211055 Sequence
9	300.4	94.5	384	6	AX032417	AX032417 Chimeric
10	300.4	94.5	384	6	BD004717	BD004717 Chimeric
11	300.4	94.5	9209	6	AR000007	AR000007 Sequence
12	300.4	94.5	9209	6	AR060920	AR060920 Sequence
13	300.4	94.5	9209	6	AR211052	AR211052 Sequence
14	300.4	94.5	9209	6	AX032414	AX032414 Sequence
15	300.4	94.5	18986	6	BD004714	BD004714 Chimeric
16	300.4	94.5	18986	6	AR051652	AR051652 Sequence
17	300.4	94.5	18986	6	AR092290	AR092290 Sequence
18	298.8	94.0	384	6	AR015962	AR015962 Sequence
19	298.8	94.0	1370	10	MUSIGKAAR	K01641 Mouse Ig ka
20	297.2	93.5	9209	6	AR015961	AR015961 Sequence
21	295.6	93.0	318	6	AR096196	AR096196 Sequence
22	295.6	93.0	318	6	AR210595	AR210595 Sequence
23	295.6	93.0	335	6	AR096195	AK096195 Sequence
24	295.6	93.0	335	6	AR210594	AR210594 Sequence
25	295.6	93.0	403	10	IO9200	IO9200 Sequence 40
26	295.6	93.0	403	10	MUSIGKCNA	M17954 Mouse Ig re
27	295.6	93.0	477	10	S76823	S76823 Ig V kappa
28	294.2	92.5	345	10	MUSIGKVA2A	M97864 Mouse hybri
29	294	92.5	403	6	I05923	I05923 Sequence 39
30	292.6	92.0	309	10	MMIGVKP4	X06517 Mouse Ig ac
31	292.4	91.9	302	10	MUSIGKAFE	M64153 Mus muscu
32	290.8	91.4	350	10	AY058906	AY058906 Mus muscu
33	290.8	91.4	384	10	MMU05285	MMU05285 Mus muscu
34	290.8	91.4	403	6	IO8812	IO8812 Sequence 14
35	290.8	91.4	732	6	A51863	A51863 Sequence 27
36	290.8	91.4	732	6	A83237	A83237 Sequence 57
37	290.8	91.4	732	6	AR085831	AR085831 Sequence
38	290.8	91.4	732	6	AR182961	AR182961 Sequence
39	289.4	91.0	318	12	AF277092	AF277092 Synthetic
40	289.4	91.0	765	6	AX057984	AX057984 Sequence 57
41	289.4	91.0	1239	6	AX057945	AX057945 Sequence
42	289.4	91.0	1280	6	AX057947	AX057947 Sequence
43	288.2	90.6	435	10	A17967	A17967 Variable re
44	288	90.6	360	10	AF029237	AF029237 Mus muscu
45	287.6	90.4	705	6	A83197	A83197 Sequence 17

ALIGNMENTS

RESULT 1
MMIG013

JOURNAL   Submitted (09-JAN-1989) K. Meek, University of Texas Southwestern
          Medical School, 5323 Harry Hines Blvd. Microbiology, Dallas Texas
          75235, USA
REFERENCE 2 (bases 1 to 321)
AUTHORS   Meek,K., Hasemann,C., Pollok,B., Alkan,S.S., Brait,M., Slaoui,M.,
          Urbain,J. and Capra,J.D.
TITLE   Structural characterization of antiidiotypic antibodies. Evidence
          that Ab2s are derived from the germline differently than Ab1s
JOURNAL   J. Exp. Med. 169 (2), 519-533 (1989)
MEDLINE   89094248
PUBMED   2492056
FEATURES   Location/Qualifiers
     source   1..321
                     /organism="Mus musculus"
                     /strain="Balb/c"
                     /db_xref="taxon:10090"
                     /cell_line="Hybridoma 2D3-K"
     gene   1..321
                     /gene="IG kappa light chain"
     mRNA   <1..>321
                     /gene="IG kappa light chain"
                     /note="variable region"
                     /evidence=experimental
     CDS   <1..>321
                     /gene="IG kappa light chain"
                     /note="variable region"
                     /codon_start=1
                     /product="IG kappa light chain"
                     /protein_id="CAA41461.1"
                     /db_xref="GI:938245"
                     /translation="QIVLSQSPAILSASPGEKVTMTCRASSSVSYMHWYQQKPGSSPK
                     PWISATSNLASGVPARFSGSGSGTSYSLTISRVEAEDAATYYCHQWSSNPPTFGGGTK
                     LEIKR"
     v_region   <1..>321
                     /gene="IG kappa light chain"
                     /product="IG kappa light chain"
                     /note="variable region"

BASE COUNT   78 a   92 c   80 g   71 t
ORIGIN

Query Match   95.5%; Score 303.6; DB 10; Length 321;
  Best Local Similarity   97.2%; Pred. No. 3.8e-90;
  Matches 309; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy   1 CAAATTGTTCTCTCCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAAAAGGTCACA 60
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1 CAAATTGTTCTCTCCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAAAAGGTCACA 60

Qy   61 ATGACTTGCAGGGCGCCAGCTCAAGTGTAAAATACATGCACTGGTACCAGCAGAAGCCAGGA 120
             ||||||||||||||||||||||||||||| ||||||||||||||||| |||||||||||||
Db   61 ATGACTTGCAGGGCGCCAGCTCAAGTGTAAGTTACATGCACTGGTATCAGCAGAAGCCAGGA 120

Qy   121 TCCTCCCCCAAACCCTGGATTTCTGCCACATCCAACCTGGCTTCTGGAGTCCCTGCTCGC 180
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   121 TCCTCCCCCAAACCCTGGATTTCTGCCACATCCAACCTGGCTTCTGGAGTCCCTGCTCGC 180

Qy   181 TTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGAGTGGAGGCTGAA 240
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   181 TTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGAGTGGAGGCTGAA 240

Qy   241 GATGCTGCCACTTATTACTGCCACCAGTGGAGTAGTAACCCACCACCCACGTTCGGAGGGGGG 300
             ||||||||||||||||||||||||| |||||||||||||||||||||||||||||||||||
Db   241 GATGCTGCCACTTATTACTGCCAGCAGTGGAGTAGTAACCCACCACCCACGTTCGGAGGGGGG 300

Qy   301 ACCATGCTGGAAATAAGA 318
             |||| ||||||||||| |
Db   301 ACCAAGCTGGAAATAAA 318

ACCESSION   AF178620
VERSION   AF178620.1 GI:5853223
KEYWORDS   .
SOURCE   Mus musculus
  ORGANISM Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1 (bases 1 to 318)
AUTHORS   Putterman,C., Deocharan,B. and Diamond,B.
TITLE   Molecular analysis of the autoantibody response in peptide-induced
            autoimmunity
JOURNAL   J. Immunol. 164 (5), 2542-2549 (2000)
MEDLINE   20143847
PUBMED   10679092
REFERENCE   2 (bases 1 to 318)
AUTHORS   Putterman,C., Deocharan,B. and Diamond,B.
TITLE   Direct Submission
JOURNAL   Submitted (17-AUG-1999) Rheumatology/Medicine, Albert Einstein
            College of Medicine, 1300 Morris Park Ave., Bronx, NY 10461, USA
FEATURES   Location/Qualifiers
     source   1..318
                     /organism="Mus musculus"
                     /strain="BALB/c"
                     /db_xref="taxon:10090"
                     /cell_line="39-9"
                     /cell_type="hybridoma"
                     /note="from peptide-immunized mouse"
     CDS   <1..>318
                     /note="IgM kappa; anti-peptide antibody"
                     /codon_start=1
                     /product="immunoglobulin light chain variable region"
                     /protein_id="AAD54373.1"
                     /db_xref="GI:5853224"
                     /translation="GIVLFQSPAILSASPGEKVIMTCRASSSVSYMLWYQQKPGSSPK
                     PWIYATSNLASGVPARFSGSGSGTSYSLTISRVEAEDAATYYCQQWSSNPPTFGGGTK
                     LEIK"

BASE COUNT   75 a   89 c   81 g   73 t
ORIGIN

Query Match   94.8%; Score 301.6; DB 10; Length 318;
  Best Local Similarity   97.2%; Pred. No. 1.8e-89;
  Matches 307; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

Qy   3 AATTGTTCTCTCCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAAAAGGTCACAAT 62
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3 AATTGTTCTCTCCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAAAAGGTCACAAT 62

Qy   63 GACTTGCAGGGCGCCAGCTCAAGTGTAAAATACATGCACTGGTACCAGCAGAAGCCAGGATC 122
             |||||||||||||||||||||||||| ||||||||||||||||| ||||||||||||||||
Db   63 GACTTGCAGGGCGCCAGCTCAAGTGTCAAGTTACATGCACTGGTATCAGCAGAAGCCAGGATC 122

Qy   123 CTCCCCCAAACCCTGGATTTTCTGCCACATCCAACCTGGCTTCTGGAGTCCCTGCTCGCTT 182
             ||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||
Db   123 CTCCCCCAAACCCTGGATTTATGCCACATCCAACCTGGCTTCTGGAGTCCCTGCTCGCTT 182

Qy   183 CAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGAGTGGAGGCTGAAGA 242
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   183 CAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGAGTGGAGGCTGAAGA 242

Qy   243 TGCTGCCACTTATTACTGCCAGCAGTGGAGTAGTAACCCACCACCCACGTTCGGAGGGGGGAC 302
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   243 TGCTGCCACTTATTACTGCCAGCAGTGGAGTAGTAACCCACCACCCACGTTCGGAGGGGGGAC 302

Qy   303 CATGCTGGAAATAAGA 318
             |||| ||||||||| |
Db   303 CAAGCTGGAAATAAA 318

RESULT 2
LOCUS   AF178620   318 bp   mRNA   linear   ROD 22-MAY-2000
DEFINITION Mus musculus 39-9 immunoglobulin light chain variable region mRNA,

RESULT 3
LOCUS   AF178619   318 bp   mRNA   linear   ROD 22-MAY-2000
DEFINITION Mus musculus 8-3 immunoglobulin light chain variable region mRNA,